IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Ricky W. Purcell et al. Examiner: Aaron F. Roane

Serial No.: 10/648,590 Group Art Unit: 3739

Filed: August 25, 2003 Docket: 1443.053US1

For: COLD PACK

APPEAL BRIEF UNDER 37 CFR § 41.37

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Commissioner for Patents
P.O. Box 1450
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Sir:

The Appeal Brief is presented in support of the Notice of Appeal to the Board of Patent Appeals and Interferences, filed on January 19, 2007, from the Final Rejection of claims 6, 7, 10-12, 14-16, 29-31, 34 and 36 of the above-identified application, as set forth in the Final Office Action mailed on November 1, 2006.

The Commissioner of Patents and Trademarks is hereby authorized to charge Deposit Account No. 19-0743 in the amount of $500.00 which represents the requisite fee set forth in 37 C.F.R. § 41.20(b)(2). The Appellants respectfully request consideration and reversal of the Examiner's rejections of pending claims.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

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1. REAL PARTY IN INTEREST

The real party in interest of the above-captioned patent application is the assignee, KIMBERLY-CLARK WORLDWIDE, INC..

2. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant that will have a bearing on the Board's decision in the present appeal.

3. STATUS OF THE CLAIMS

The present application was filed on August 25, 2003 with claims 1-28. By Preliminary Amendment dated February 21, 2005, the claims were amended, and new claims 29-39 were added. A non-final Office Action was mailed on April 4, 2005. A final Office Action was mailed on July 28, 2005. An RCE was filed on October 26, 2005. A non-final Office Action was mailed on December 8, 2005. A final Office Action was mailed on April 21, 2006. A Pre-Appeal Request for Review was mailed on June 26, 2006, with a Notice of Appeal. A Decision on Pre-Appeal Brief was mailed on August 15, 2006. A final Office Action was mailed on October 19, 2006.

Claims 6, 7, 10-12, 14-16, 29-31, 34 and 36 stand twice rejected, remain pending, and are the subject of the present appeal.

4. STATUS OF AMENDMENTS

No amendments have been made subsequent to the Final Office Action dated May 19, 2004.

5. SUMMARY OF CLAIMED SUBJECT MATTER

Figures 3 and 4 and the specification at page 7, line 30 through page 8, line 20 illustrate and describe a cold pack 20. The cold pack 20 includes an enclosure 21 and a liquid 24 and solute 22 sealed inside the enclosure 21. The solute 22 and the liquid 24 (e.g., water) are segregated within the enclosure 21 by a membrane 26.

The cold pack 20 further includes an absorbent core (e.g., an absorbent fibrous layer 27) within the enclosure 21 (see Figure 3). In some embodiments, the absorbent core may be formed of fibers (e.g., pulp fiber).

The absorbent layer 27 retains an endothermic solution 28 that is formed within the enclosure 21 by rupturing the membrane 26 (see Figure 4) to cause mixing of the solute 22 and the liquid 24. Once the solute 22 and the liquid 24 are mixed to form the endothermic solution 28, the absorbent layer 27 retains and spreads the endothermic solution 28 throughout the enclosure 21 such that the cold pack 20 uniformly cools an injured portion of a body when the cold pack 20 is positioned on, or near, the body.

Dissolving the solute 22 within the liquid 24 produces a rapid endothermic reaction within the endothermic solution 28 that quickly drops the temperature of the cold pack 20 to its cooling temperature. The fibrous absorbent core retains and distributes the fast-acting endothermic solution throughout the cold pack 20 such that the cold pack 20 provides uniform and efficient cooling to an injured portion of a body.

The cold pack (i) quickly dissolves a solute within the liquid to produce a fast-acting endothermic solution; and (ii) uniformly cools an injured portion of a body by retaining and spreading the endothermic solution throughout the interior of the cold pack.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 6, 7, 10-12, 14-16, 29-31, 33 [*sic*] and 36 were rejected under 35 USC § 103(a) as being unpatentable over Dunshee et al. (US 4,462,224) in view of Sabin (US 6,099,555) in view of Avery (US 5,486,206). [Claim 33 was previously cancelled; "33" should read "34".]

7. ARGUMENT

A) The Applicable Law under 35 U.S.C. §103(a)

To sustain a rejection under 35 U.S.C. 103, references must be cited that teach or suggest all the claim elements. M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983); *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985); MPEP § 2141.02.

Further, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP § 2143. The Examiner must avoid hindsight. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990). The Office Action must further provide specific, objective evidence of record for a finding of a suggestion or motivation to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. *In re Sang Su Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002).

B) Discussion of the rejection of claims 6, 7, 10-12, 14-16, 29-31, 33 [*sic*] and 36 under 35 USC § 103(a) as being unpatentable over Dunshee et al. (US 4,462,224) in view of Sabin (US 6,099,555) in view of Avery (US 5,486,206).

Appellant initially notes that claim 33 is rejected even though claim 33 has been previously canceled. In addition, claim 34 does not appear to be rejected under 35 U.S.C. § 103(a).

Appellant respectfully submits that a *prima facie* case of obviousness has been not established against claims 6, 7, 10-12, 15-16, 29-31, 34 and 36 because (i) Dunshee, Sabin and Avery do not disclose either singularly, or in combination, the invention as claimed in claims 6,

7, 10-12, 15-16, 29-31, 34 and 36; (ii) the Examiner has not provided an adequate motivation to combine Dunshee, Sabin and Avery; and (iii) Avery teaches away from any combination with Sabin and Dunshee.

Dunshee

Dunshee is directed to a three-compartment, instant hot or cold, reusable cold pack for transferring heat to or from an object (see Dunshee Abstract). A solvent, a cold particulate material and a gelling agent are initially segregated within the cold pack by a couple of "single use" seams 24, 26 (see FIGS. 2 and 3 of Dunshee). The cooling (or heating) function of the cold pack is begun by fracturing the seams 24, 26 and mixing the solvent with the gelling agent and the cold particulate material.

Dunshee does not disclose (i) "a fibrous layer within said enclosure, said fibrous layer including fibers that retain said endothermic solution within said enclosure to spread said endothermic solution throughout the interior of said enclosure" as recited in claim 6; or (ii) "an absorbent core within said enclosure, said absorbent core being formed at least partially of fibers which retain said endothermic solution within said enclosure to spread said endothermic solution throughout the interior of said enclosure" as recited in claim 12. Appellant respectfully notes that Dunshee provides no teaching or suggestion as to an absorbent core that retains an endothermic solution because the cooling gel which is formed upon mixing in Dunshee is actually the endothermic solution itself. Therefore, Dunshee does not disclose an absorbent core that retains the endothermic solution as indicated by the Examiner because nothing in the enclosure retains the cooling gel to spread the cooling gel throughout the enclosure.

Sabin

Sabin is directed to a cold pack that includes a gelling agent which is adhered as a permeable coating to a particulate "cold generating" material (see, col. 1, lines 49-52 of Sabin). The combined gelling agent and cold particulate material are initially segregated from a liquid within the cold pack by a "single use" frangible membrane (see, col. 2, lines 1-11 of Sabin). The cooling function of the cold pack is begun by fracturing the membrane and mixing the liquid with the combined gelling agent and cold particulate material.

Sabin does not disclose (i) "a fibrous layer within said enclosure, said fibrous layer including fibers that retain said endothermic solution within said enclosure to spread said endothermic solution throughout the interior of said enclosure" as recited in claim 6; or (ii) "an absorbent core within said enclosure, said absorbent core being formed at least partially of fibers which retain said endothermic solution within said enclosure to spread said endothermic solution throughout the interior of said enclosure" as recited in claim 12. Appellant respectfully notes that Sabin provides no teaching or suggestion as to an absorbent core that retains an endothermic solution because the cooling gel which is formed upon mixing in Sabin is actually the endothermic solution itself. Therefore, Sabin does not disclose an absorbent core that retains the endothermic solution as indicated by the Examiner because nothing in the enclosure retains the cooling gel to spread the cooling gel throughout the enclosure.

Avery

Avery is directed to a "reusable" thermal pack that includes one or more pads which encapsulate a gel (see, col. 1, lines 53-57 of Avery). The gel in Avery includes a fibrous, flaked or shredded material (see, col. 2, lines 1-2 of Avery).

Avery does not disclose (i) "a fibrous layer within said enclosure, said fibrous layer including fibers that retain said endothermic solution within said enclosure to spread said endothermic solution throughout the interior of said enclosure" as recited in claim 6; or (ii) "an absorbent core within said enclosure, said absorbent core being formed at least partially of fibers which retain said endothermic solution within said enclosure to spread said endothermic solution throughout the interior of said enclosure" as recited in claim 12. Appellant respectfully notes that fibrous material disclosed in Avery *does not retain an endothermic solution* to spread the endothermic solution. In addition, the drawings in Avery illustrate that the fibers in Avery are not part of any type of structure (i.e., like a "core") such that Avery does not disclose an absorbent core.

I. ***Dunshee, Sabin and Avery do not teach or suggest every element of claims*** *6, 7, 10-12, 14-16, 29-31, 33 [sic] and 36.*

As discussed above, none of the cited references teaches or suggests either singularly, or in combination, (i) "a fibrous layer within said enclosure, said fibrous layer including fibers that retain said endothermic solution within said enclosure to spread said endothermic solution throughout the interior of said enclosure" as recited in claim 6; or (ii) "an absorbent core within said enclosure, said absorbent core being formed at least partially of fibers which retain said endothermic solution within said enclosure to spread said endothermic solution throughout the interior of said enclosure" as recited in claim 12. Appellant again respectfully submits that Dunshee, Sabin and/or Avery do not teach or suggest an absorbent core, especially an absorbent core (or layer) that includes fibers which retain an endothermic solution.

II. There is no motivation or suggestion to combine Dunshee, Sabin and Avery.

The Final Office Action states at pages 4-5 that

> "it would have been obvious to one having ordinary skill in the art to modify the invention of Dunshee et al., as taught by Sabin, to mix liquid (solvent), solute and gelling agent together as an alternate cooling modality and in order to provide a relatively comfortable cooling device, and as further taught by Avery, to provide the gel with a fibrous material in order to increase gel viscosity and heat capacity."

Appellant respectfully traverses these assertions and notes that the Examiner provides no support for such assertions. In addition, Appellant submits that the statements are mere conclusory statements of subjective belief because the statements are similar to the statements made by the Examiner and board in *In re Lee*, 277 F.3d 1338 (Fed. Cir. 2002).

> "With respect to Lee's application, neither the examiner nor the Board adequately supported the selection and combination of the Nortrup and Thunderchopper references to render obvious that which Lee described. The examiner's conclusory statements that 'the demonstration mode is just a programmable feature which can be used in many different devices for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is material to patentablility, and could not be resolved on subjective belief and unknown authority. It is improper,

> in determining whether a person of ordinary skill in the art would have been lead to this combination of references, simply to use '[use] that which the inventor taught against its teacher.' *W.L. Gore V. Garlock, Inc.*, 721 F. 2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983)." *Lee,* at 1343, 1344.

Appellant respectfully submits that the only teaching or suggestion relating to (i) "a fibrous layer within said enclosure, said fibrous layer including fibers that retain said endothermic solution within said enclosure to spread said endothermic solution throughout the interior of said enclosure" as recited in claim 6; or (ii) "an absorbent core within said enclosure, said absorbent core being formed at least partially of fibers which retain said endothermic solution within said enclosure to spread said endothermic solution throughout the interior of said enclosure" as recited in claim 12 is found in Appellant's disclosure. Appellant respectfully notes that the Office Action has not provided objective evidence that there is an adequate motivation to combine all three of the cited references.

III. Avery teaches away from any combination with Dunshee and Sabin.

A factor cutting against a finding of motivation to combine or modify the prior art is when the prior art teaches away from the claimed combination. A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path the Appellant took. *In re Gurley*, 27 F.3d 551, 31 USPQ 2d 1130, 1131 (Fed. Cir. 1994); *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966); *In re Sponnoble*, 405 F.2d 578, 587, 160 USPQ 237, 244 (C.C.P.A. 1969); *In re Caldwell*, 319 F.2d 254, 256, 138 USPQ 243, 245 (C.C.P.A. 1963).

Appellant respectfully notes that Avery teaches away from any combination with Dunshee and/or Sabin because Avery teaches a "reusable" thermal pack (see Avery at col. 1, lines 53 and 56). In contrast, Dunshee and Sabin relate to a *one-time use cold pack* where the liquid and the cold particulate material are initially segregated and then mixed together to start the endothermic reaction. Once the liquid and the cold particulate material are mixed together in the cold packs disclosed in Dunshee and Sabin, the endothermic chemical reaction can not be carried out again. Appellant respectfully submits that based on the reusable thermal pack

teachings of Avery, one of ordinary skill in the art would look away from the one-time use devices that are disclosed in Dunshee and Sabin.

8. SUMMARY

For the reasons argued above, claims 6, 7, 10-12, 14-16, 29-31, 34 and 36 were not properly rejected under § 103(a) as being unpatentable over Dunshee et al. (US 4,462,224) in view of Sabin (US 6,099,555) in view of Avery (US 5,486,206).

It is respectfully submitted that the art cited does not render the claims anticipated and that the claims are patentable over the cited art. Reversal of the rejection and allowance of the pending claim are respectfully requested.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this ~~28th~~ 4/5 day of ~~March~~ April 2007.

CANDIS BUENDING

Name

Signature

CLAIMS APPENDIX

6. A cold pack comprising:

an enclosure;

a solute within said enclosure;

a liquid within said enclosure;

a membrane segregating said liquid from said solute, wherein rupturing said membrane mixes said liquid with said solute to produce an endothermic solution within said enclosure; and

a fibrous layer within said enclosure, said fibrous layer including fibers that retain said endothermic solution within said enclosure to spread said endothermic solution throughout the interior of said enclosure.

7. The cold pack of claim 6 wherein said solute is a powdered solute.

10. The cold pack of claim 9 wherein rupturing said membrane causes said endothermic solution to be retained by said fibrous layer.

11. The cold pack of claim 6 wherein said membrane is polyethylene.

12. A cold pack comprising:

an enclosure;

a solute within said enclosure;

a liquid within said enclosure;

a membrane segregating said liquid from said solute, wherein rupturing said membrane mixes said liquid with said solute to produce an endothermic solution within said enclosure; and

an absorbent core within said enclosure, said absorbent core being formed at least partially of fibers which retain said endothermic solution within said enclosure to spread said endothermic solution throughout the interior of said enclosure.

14. The cold pack of claim 12 wherein said membrane segregates the liquid from the absorbent core.

15. The cold pack of claim 12 wherein said membrane segregates said absorbent core from said solute.

16. The cold pack of claim 15 wherein substantially all of said solute is dissolved in said liquid to form said endothermic solution before said endothermic solution is retained by said absorbent core.

29. The cold pack of claim 6 wherein said membrane segregates said fibrous layer from said solute.

30. The cold pack of claim 6 wherein said solute is ammonium nitrate.

31. The cold pack of claim 6 wherein said fibers are pulp fibers.

34. The cold pack of claim 12 wherein said fibers are pulp fibers.

36. The cold pack of claim 12 wherein said liquid is water.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.